

PCG-SRX87/SRX87P/SRX99/SRX99K/SRX99P

SERVICE MANUAL

For American Area

US Model

Canadian Model

Ver 4-2002I

Revision History

Lineup : PCG-SRX99P
PCG-SRX99K
PCG-SRX99
PCG-SRX87P
PCG-SRX87



Illust : PCG-SRX87P



The Standard for
Wireless Fidelity.



- Design and specifications are subject to change without notice.

NOTEBOOK COMPUTER

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate.

Dispose of used battery promptly.

Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilatation or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the Δ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

**LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE Δ SUR LES
DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT
CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE
REEMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY
DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU
DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.**

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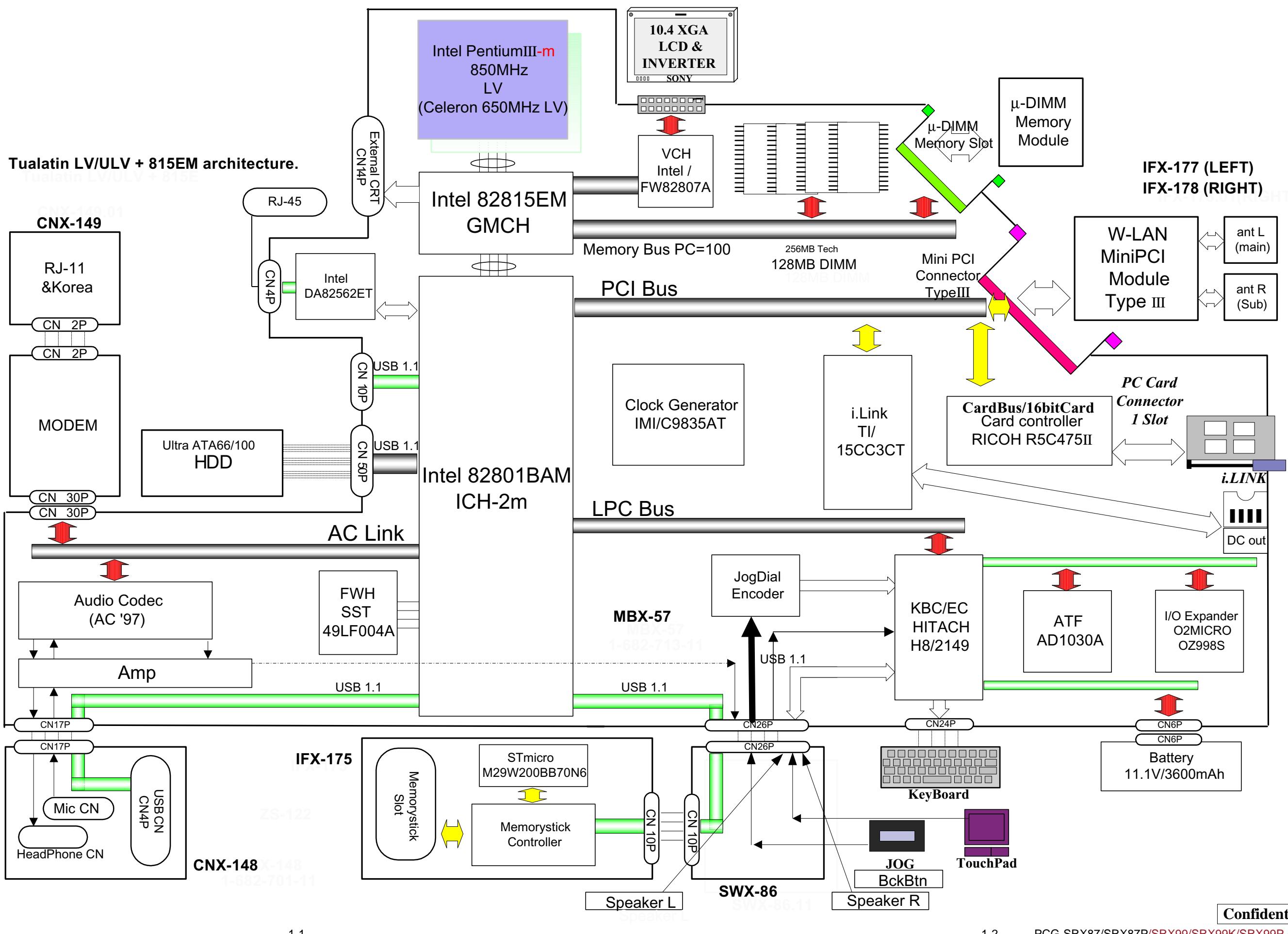
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History of the changes is shown as the
“Revision History” at the end of this data.

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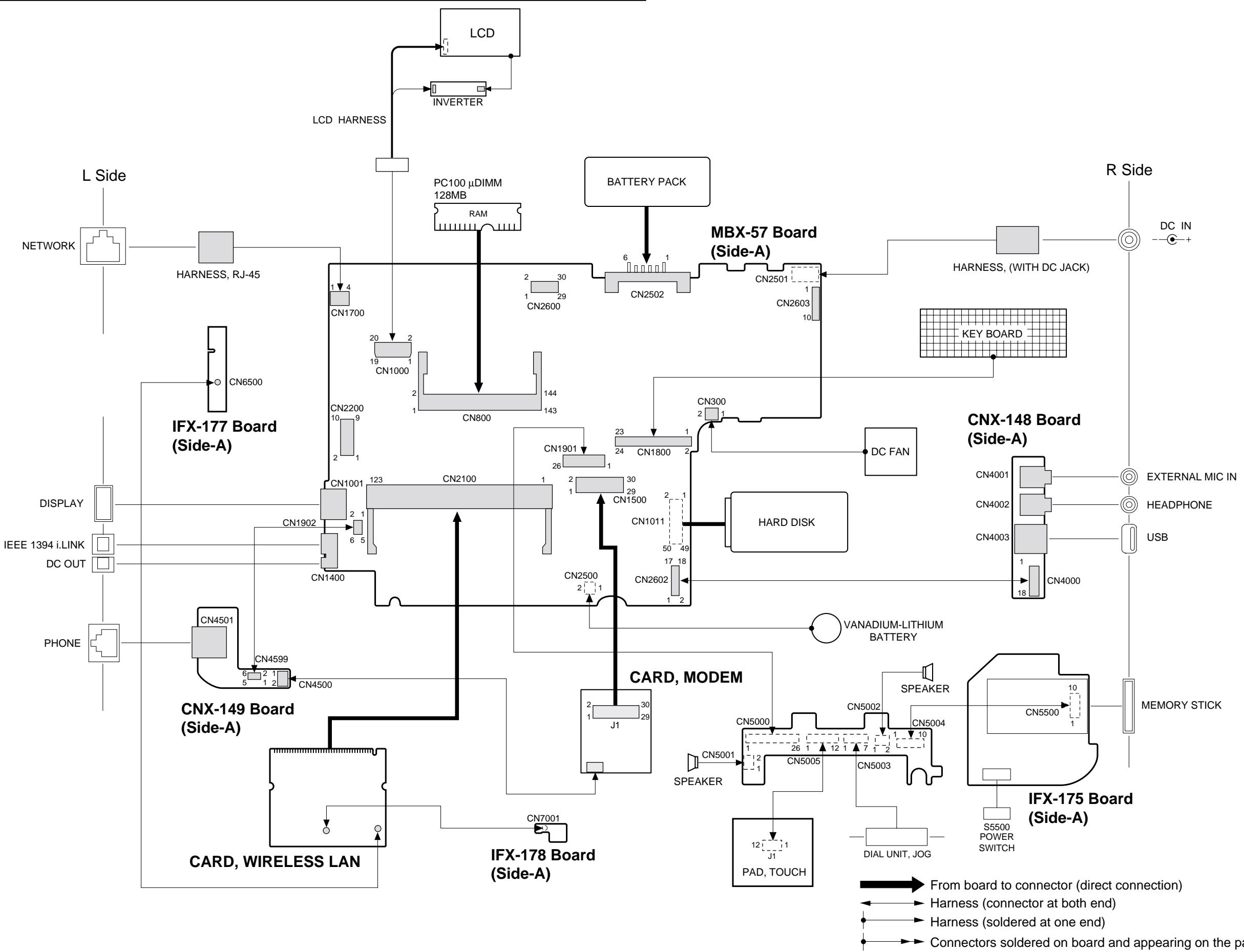
CHAPTER 1.

BLOCK DIAGRAM



CHAPTER 2.

FRAME HARNESS DIAGRAM



CHAPTER 3.

EXPLODED VIEWS AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- When two or more parts are shown in parallel, use the part described first as the main part.
- The indication [CH] is used for identification of part type.
- Regarding the boards of this model, the discrete parts on the boards cannot be replaced. However, Some connectors can be replaced.

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

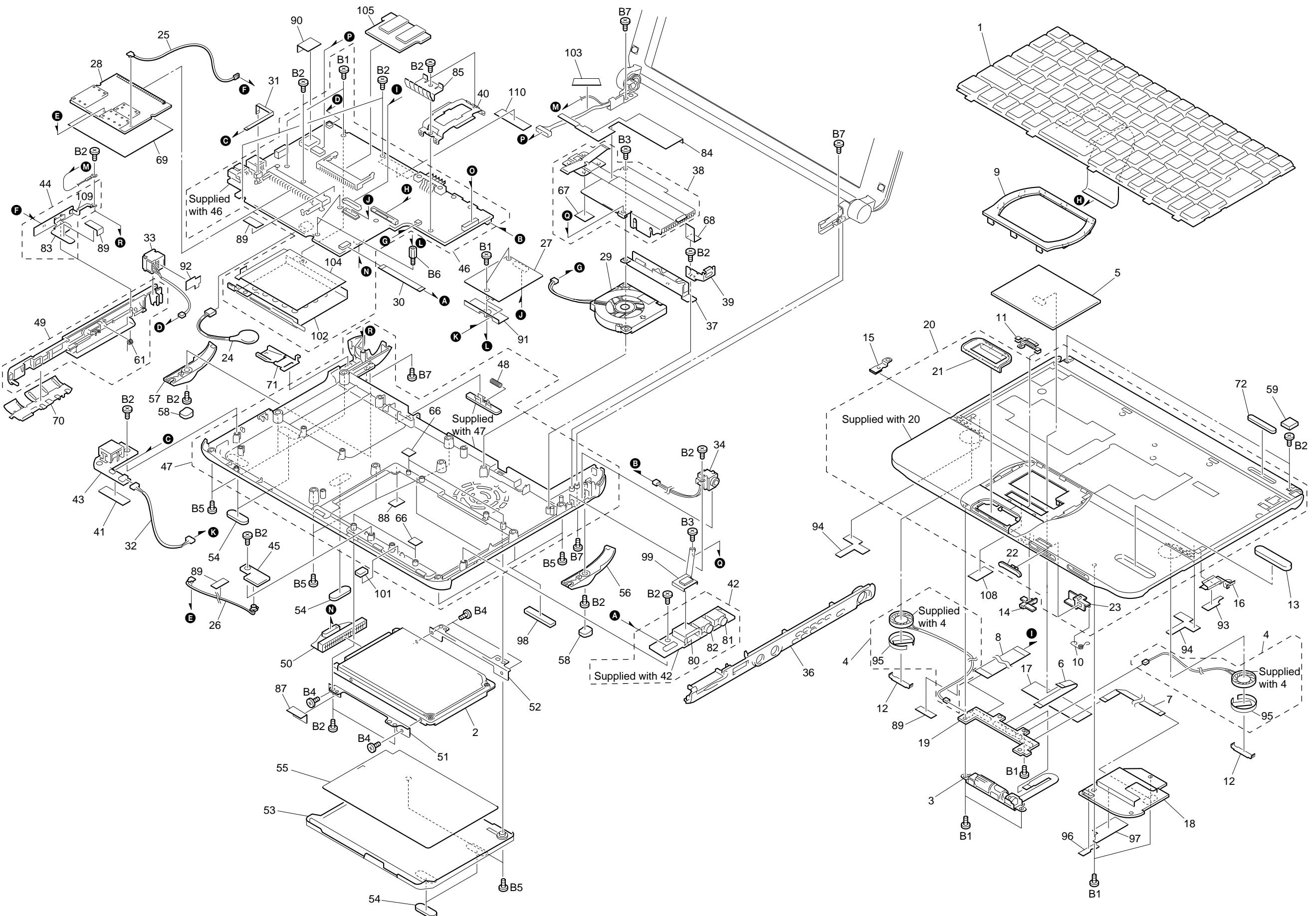
Les composants identifiés par une marque \triangle sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

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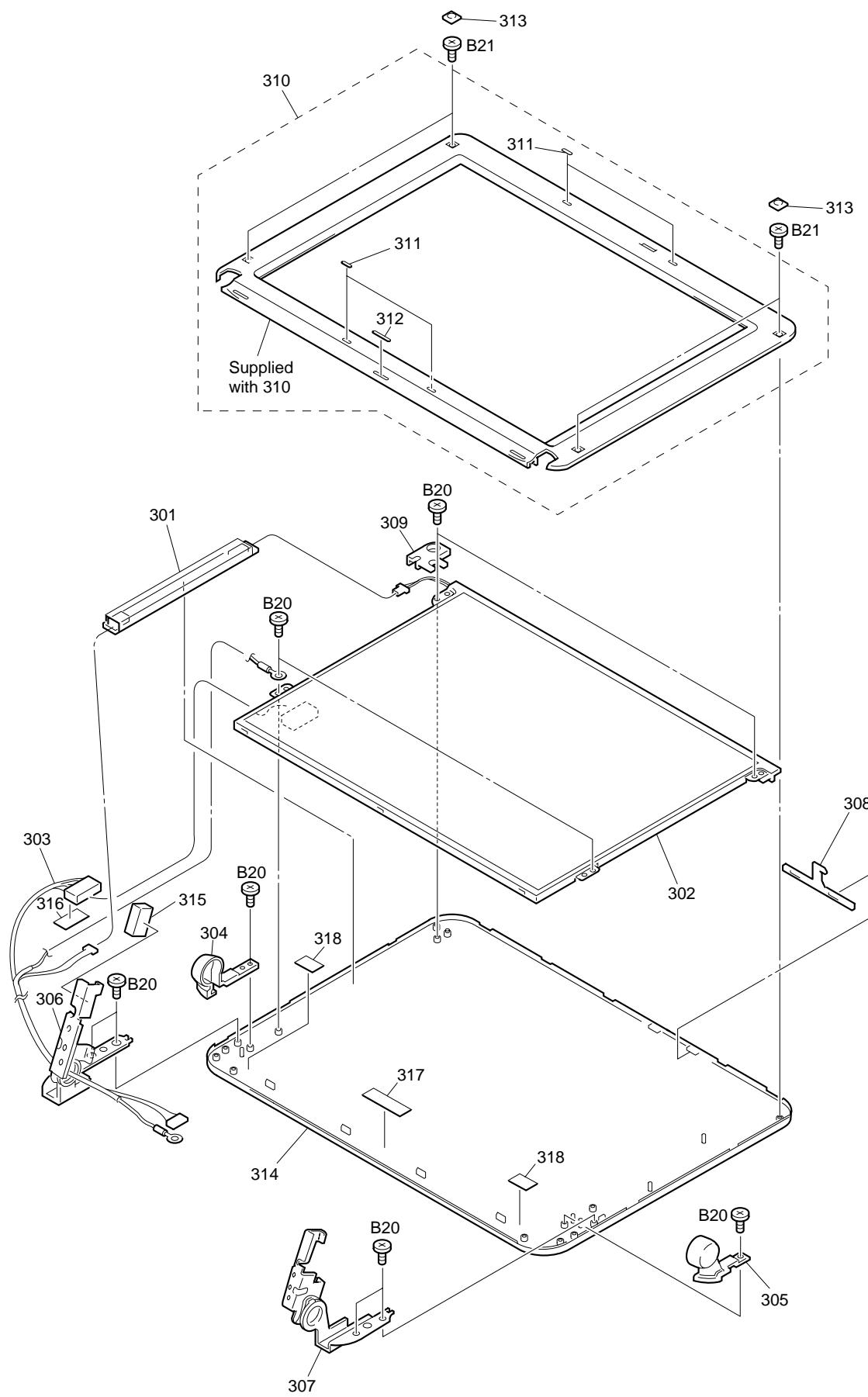
3-1. Main Section

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	1-476-939-21	KEY BOARD UNIT (US)	67	4-659-832-01	SHEET, THERMAL
2	A-8059-138-A	ASSY HDD 20GB (H, 20) (S)	68	4-659-844-01	SHEET (SCREW)
3	1-476-945-11	ENCODER, JOG	69	4-659-904-01	SHEET (MPCI)
4	1-544-951-21	SPEAKER	70	X-4624-183-2	LID (IV) ASSY
5	1-796-319-11	PAD, TOUCH	71	X-4624-184-2	LID (L) ASSY
6	1-823-571-12	CABLE, FLEXIBLE FLAT (SWX-TP)	72	4-663-527-31	(SRX87)...LABEL (ID)
7	1-823-572-11	CABLE, FLEXIBLE FLAT	72	4-663-527-41	(SRX87P)...LABEL (ID)
8	1-823-573-12	CABLE, FLEXIBLE FLAT	72	4-667-395-01	(SRX99)...LABEL (ID)
9	4-657-941-01	COVER (TP)	72	4-667-395-11	(SRX99P)...LABEL (ID)
10	4-657-944-01	SPRING (R), TORSION	72	4-667-395-21	(SRX99K)...LABEL (ID)
11	4-657-945-01	PLATE (TP)	80	1-794-548-11	CONNECTOR, USB(A)
* 12	4-657-949-01	HOLDER (SP)	81	1-793-162-11	JACK, SMALL TYPE
13	4-657-950-01	WINDOW (MS)	82	1-695-514-21	JACK (SMALL TYPE) 1P
14	4-657-951-02	LEVER	83	4-660-264-01	PLATE (ANT)
15	4-659-533-01	PLATE (L), GROUND	84	4-660-234-01	SHEET (HEAT SINK)
16	4-659-534-02	PLATE (R), GROUND	85	4-660-233-01	PLATE (HEAT SINK), GROUND
17	4-659-843-02	SHEET (TP)	87	4-660-235-01	GASKET (A)
18	A-8067-437-A	COMPLETE PWB IFX-175	88	4-660-236-01	GASKET (B)
19	A-8067-047-A	COMPLETE PWB SWX-86	89	4-658-789-02	TAPE (HARNESS)
20	X-4624-198-5	HOUSING (PARM REST) ASSY	90	4-660-756-01	SHEET (PULSE)
21	4-657-940-02	ESCUTCHEON (JOG)	91	4-657-991-01	SHEET (JOG), INSULATING
22	4-657-943-01	KNOB (LATCH)	92	4-661-037-02	SHEET (LAN), INSULATING
23	4-657-952-01	LEVER (LATCH)	93	4-660-809-01	SHEET (GROUND PLATE R)
24	1-468-624-21	BATTERY, VANADIUM-LITHIUM	94	4-660-808-01	SHEET (GROUND PLATE)
25	1-757-756-51	CABLE, COAXIAL(WITHUFLCONNECTOR)	95	4-660-807-01	SHEET (SPEAKER)
26	1-757-756-61	CABLE, COAXIAL(WITHUFLCONNECTOR)	96	4-661-076-01	SHEET (PW)
27	1-761-380-23	CARD, MODEM	97	4-661-214-01	SHEET (MS), INSULATING
28	1-761-495-11	CARD, WIRELESS LAN	98	4-660-237-01	GASKET (C)
29	1-763-803-11	FAN, DC	99	4-661-176-01	SHEET (USB)
30	1-823-569-11	CABLE, FLEXIBLE FLAT	101	4-660-238-01	GASKET (D)
31	1-823-570-11	CABLE, FLEXIBLE FLAT(MBX-CNX2)	102	1-816-204-11	CONNECTOR, PC CARD (EJECTOR)
32	1-960-827-41	HARNESS (2 PIN)	103	4-660-752-01	TAPE (LCD)
33	1-961-480-11	HARNESS, RJ-45	104	4-657-983-02	SHEET (PC CARD), INSULATING
34	1-961-483-11	HARNESS (WITH DC JACK)	105	6-701-830-01	IC M463S1654CT1-L7A (PC-100 µDIMM (128MB))
36	4-657-957-02	ESCUTCHEON (R)	108	4-662-036-01	SHEET (FFC), INSULATING
37	4-657-959-01	COVER (BR)	109	4-658-784-01	PLATE (WL), GROUND
* 38	4-657-963-01	HEAT SINK	110	4-648-304-01	BLIND (PC BOARD)
* 39	4-657-971-01	BRACKET (K)	B1	4-644-492-51	ACE (M2), LOCK
* 40	4-657-975-01	HOLDER (HEAT SINK)	B2	4-645-016-41	ACE (M2) (DIA.4.6), LOCK
41	4-657-984-01	SHEET (MODEM), INSULATING	B3	4-654-273-11	ACE (M2), LOCK
42	A-8067-039-A	COMPLETE PWB CNX-148	B4	4-635-301-01	SCREW M3X4
43	A-8067-040-A	COMPLETE PWB CNX-149	B5	4-644-492-11	ACE (M2), LOCK
44	A-8067-043-A	COMPLETE PWB IFX-177	B6	4-659-529-01	BOLT
45	A-8067-044-A	COMPLETE PWB IFX-178	B7	7-621-772-10	SCREW +B 2X4
46	A-8110-443-A	C/P MBX-57B (P850) (S)			
47	X-4624-290-3	HOUSING (BOTTOM) ASSY			
48	4-635-956-01	SPRING (B), COMPRESSION COIL			
49	X-4624-185-2	ESCUTCHEON (L) ASSY			
50	1-761-453-11	PWB, FLEXIBLE PRINT (FOR HDD)			
* 51	4-657-969-01	BRACKET (HDF)			
* 52	4-657-970-01	BRACKET (HDR)			
53	4-659-710-01	LID (HDD)			
54	4-657-986-02	FOOT			
55	4-657-981-01	SHEET (HDD), INSULATING			
56	4-657-977-01	FOOT (R), REAR			
57	4-657-976-01	FOOT (L), REAR			
58	4-657-968-01	FOOT (R)			
59	4-646-722-11	BLIND, SCREW			
61	4-657-962-11	SPRING (C), TORSION			
66	4-659-711-02	SHEET (BOSS)			

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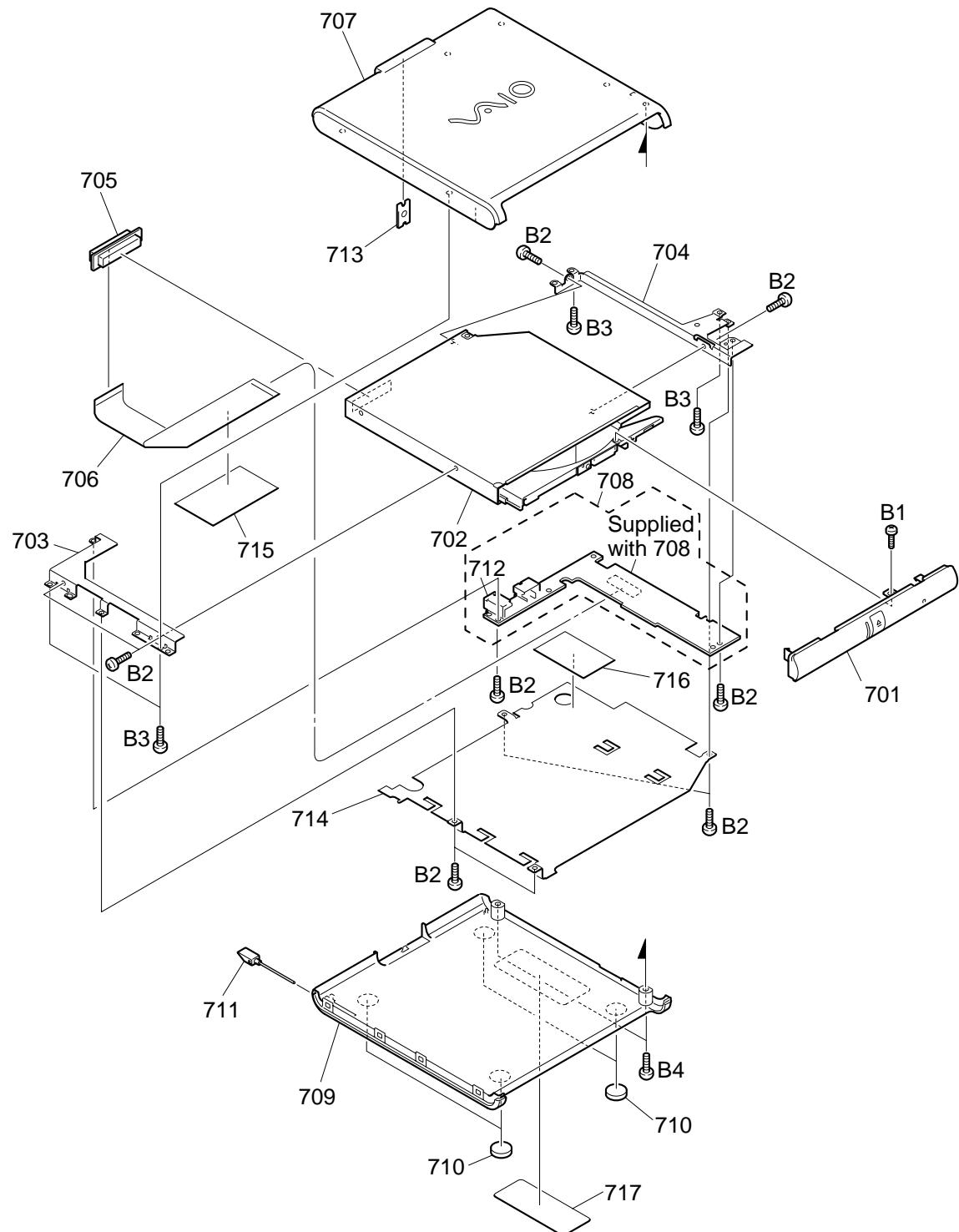
3-2. LCD Section – Made by TS–



<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>
301	1-476-874-12	INVERTER UNIT
302	A-8058-499-A	LCD ASSY(S)
303	1-961-376-12	LCD HARNESS
304	4-657-928-02	COVER (L)
305	4-657-929-02	COVER (R)
* 306	4-657-930-02	TIILT (L)
* 307	4-657-931-02	TIILT (R)
308	4-657-932-02	LATCH
309	4-657-933-01	CLAMP (LCD)
310	X-4624-178-2	HOUSING (BEZEL) ASSY
311	4-646-976-11	CUSHION (LATCH)
312	4-657-985-01	CUSHION (BZ)
313	4-659-342-01	BLIND (LCD), SCREW
314	X-4624-180-3	HOUSING (DISPLAY) ASSY
315	4-660-749-01	GASKET (TIILT)
316	4-661-728-02	SHEET (LCD HARNESS)
317	4-664-640-01	SPACER (LCD A)
318	4-664-641-01	SPACER (LCD B)

Ref.No.	Part No.	Description
B20	4-644-492-51	ACE (M2), LOCK
B21	4-645-016-41	ACE (M2) (DIA.4.6), LOCK

3-3. DVD Drive Section (SRX87/SRX87P Model)



▲ [COR] -31

Ref. No.	Part No.	Description
701	X-4624-073-1	BEZEL (DVD) ASSY
702	1-796-171- 22	DVD-ROM (SDR-081, 8X)
* 703	4-657-336-01	REINFORCEMENT
* 704	4-657-338-01	SUPPORT, PC BOARD
705	A-8067-015-A	IFX-174 MOUNTED PWB

706	1-823-520-11	FLEXIBLE FLAT CABLE
707	X-4624-116-1	CABINET (UPPER) ASSY
708	A-8067-016-A	IFX-170 COMPLETE PWB
709	4-657-335-01	CABINET (LOWER)
710	4-642-628-02	FOOT
711	4-657-352-01	PIN, EJECT
712	1-569-966-11	JACK, DC (POLARITY UNIFIED TYPE)
713	4-657-353-01	NUT PLATE
* 714	4-657-337-01	PLATE, SHIELD
715	4-659-701-01	SHEET
716	4-659-705-01	SPACER
717	4-659-867-01	LABEL

Ref. No.	Part No.	Description
B1	4-645-050-01	TITE, 0 PLATE SPECIAL HEAD (B)
B2	7-627-854-07	PRECISION SCREW +P 2X2.5 TYPE3
B3	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
B4	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT

Ref.No.	Part No.	Description
ACCESSORIES		

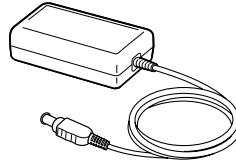
▲801	1-476-943-21	ADAPTOR, AC
▲802	1-757-562-31	CORD, POWER
803	1-823-439-11	CORD, iLINK CONNECTION
804	4-657-363-01	CLAMP
805	X-4624-074-1	STAND ASSY
806	1-756-100-42	BATTERY PACK, LITHIUM ION
	1-757-026-12	CABLE, VGA
	4-665-130-01	QUICK START
4-646-847-11	(SRX99K)...	W2K FIRST STEP GUIDE
4-646-199-01	(SRX99K)...	SPECIFICATION SHEET

MEMO

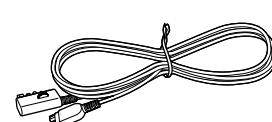
LOOK AT EXPLODED VIEWS OF THE PART

807 (SRX99/SRX99P/SRX99K)...

801
AC Adaptor (1)



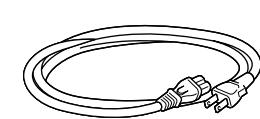
803
i LINK Connection Cord (1)



805
Stand (1)



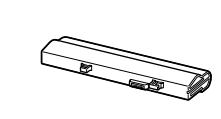
802
Power Cord (1)



804
Clamp (1)



806
Battery Pack (1)



807
CD-RW/DVD-ROM Drive
(PCGA-CRWD2)
(PCG-SRX99/SRX99P/**SRX99K** Model Only)



- The CD-RW/DVD-ROM Drive itself does not have the Part No. Refer to the PCGA-CRWD2 Service manual (9-874-566-01). Because only the 804 iLINK Connection Cord is required for connection with a computer, the following parts are not supplied with the CD-RW/DVD-ROM drive.

1-476-940-11 ADAPTOR, AC
1-757-562-31 CORD, POWER
1-790-763-21 CORD, CONNECTION
4-657-266-11 MANUAL, INSTRUCTION (FIRST)

The components identified by mark ▲ or dotted line with mark ▲ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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List of PCG-SRX Series (As of September, 2002)

Model Name	Service Manual Part No.
PCG-SRX77P	
PCG-SRX77	9-874-456-01
PCG-SRX87P	
PCG-SRX87	
PCG-SRX99	9-874-572-04
PCG-SRX99P	
PCG-SRX99K	

 : Additional Models

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Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2002.05.27	First Edition	
-02	Ver. 2	2002.08.12	Front Page (Model Line Up), Page 3-2, Page 3-9, Back Cover	N2002_080K
-03	Ver. 3	2002.08.19	 Page 3-8	N2002_081K
-04	Ver. 4	2002.09.04	Front Page (Model Line Up), Page 3-2, Page 3-7, Page 3-9, Back Cover	N2002_105AK#01
< Remarks >				